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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,931	09/13/2000	ATTAULLAH SHEIKH	36J.P248	7452

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

DUONG, THOMAS

ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/660,931

Applicant(s)

SHEIKH, ATTAULLAH

Examiner

Thomas Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 19-25, and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 19-25, and 29-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.
2. Amendment received July 8, 2005 has been entered into record. *Claims 1-12, 19-25, and 29-35* remain pending.

Response to Amendment

3. This office action is in response to the applicants Amendment filed on July 8, 2005. Applicant amended *no claims*. *Claims 1-12, 19-25, and 29-35* are presented for further consideration and examination.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the

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United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 9, 12, 19, 29, 32 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Crawley et al. (US006321270B1).

6. With regard to claims 1, 9, 12, 19, 29, 32 and 34, Crawley discloses,

- *establishing plural multicast groups, each multicast group corresponding to a respective change category for a type of change made to the directory in the directory server; and* (Crawley, col.2, lines 46-49; col.4, line 63 – col.5, line 3; col.5, lines 18-35, lines 61-66; col.9, lines 29-33; modules 66-70, fig.3)

Crawley teaches of configuring multicast groups by adding, deleting or modifying network nodes as members that subscribes to receive changes or updates in the network topology. According to Crawley, *“some network nodes participating in a particular multicast session may be preconfigured by the network administrator”* (Crawley, col.4, lines 65-67) implying that the network administrator may preconfigure a multicast session for a set of network nodes or group that, in responding to *“various types of changes, including adding new multicast members, deleting existing multicast members”*, etc. (Crawley, col.5, lines 23-25), *“the multicast control information and network nodes participating in the multicast sessions are updated”* (Crawley, col.5, lines 27-29). Furthermore, according to Crawley *“this updating may include modifications to reflection points, distribution trees, group members, existing network connections, or existing facilities”* (Crawley, col.5, lines 29-31). Crawley also states *“network nodes not participating in the multicast session (i.e. subscribing to a particular change or event) do not receive any control information”* (Crawley, col.5, lines

58-59) and that *“control point 22 monitors the network for any changes to the multicast session or changes in the network topology. If control point 22 identifies any changes, the multicast session and network nodes participating in the session are updated as needed”* (Crawley, col.5, lines 64-67). Hence, Crawley anticipates the updating of multicast information with regards to various types of changes, including adding new multicast members, deleting existing multicast members, network node failures, or network link failures to network nodes participating in the multicast sessions and particularly to group members of such sessions.

- *submitting change information for multicasting responsive to a change being made to the directory in the directory server, the change information being submitted to each member which belongs to a selected one of the plural multicast groups corresponding to the change category of the type of change made to the directory in the directory server.* (Crawley, col.2, lines 46-49; col.4, line 63 – col.5, line 3; col.5, lines 18-35, lines 61-66; col.9, lines 29-33; modules 66-70, fig.3)

Crawley teaches of configuring multicast groups by adding, deleting or modifying network nodes as members that subscribes to receive changes or updates in the network topology. Crawley teaches of transmitting the updates information, which reflects a change in network topology (i.e. node added, node deleted, etc.) via multicasting to relevant nodes that are members of particular multicast groups, which may subscribe to receive updates on added nodes, deleted nodes, etc. Furthermore, it is well known in the art to configure multicast groups containing members that are interested in receiving certain updates or

information in response to a network topology change such as updates on added nodes, deleted nodes, etc. Crawley also states *"network nodes not participating in the multicast session (i.e. subscribing to a particular change or event) do not receive any control information"* (Crawley, col.5, lines 58-59) and that *"control point 22 monitors the network for any changes to the multicast session or changes in the network topology. If control point 22 identifies any changes, the multicast session and network nodes participating in the session are updated as needed"* (Crawley, col.5, lines 64-67).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-8, 10-11, 20-25, 30-31, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawley (US006321270B1) and in view of Filtler (US006366913B1).

9. With regard to claims 2-6, 10-11, 20-23, 30-31, 33 and 35, Crawley discloses,

See *claims 1, 9, 19, 29, 32 and 34* rejection as detailed above.

However, Crawley does not explicitly disclose,

- *wherein the change information is submitted to the multicast groups utilizing a connectionless protocol.*

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- *wherein each of the plurality of change categories correspond to an add, delete, modify or search changes.*
- *wherein changes made in the directory server are performed utilizing a Lightweight Directory Server Protocol.*
- *wherein change information is submitted for multicast by a plug-in that extends capabilities of the directory server.*

Fitler teaches,

- *wherein the change information is submitted to the multicast groups utilizing a connectionless protocol (Fitler, col.4, lines 16-18; col.5, lines 11-13, lines 31-36; col.6, lines 8-15)*

Fitler teaches of configuring dynamic groups using tree structured directory service implemented in connectionless protocols such as LDAP and X.500.

- *wherein changes made: in the directory server are performed utilizing a Lightweight Directory Server Protocol (Fitler, col.4, lines 16-18; col.5, lines 11-13, lines 31-36; col.6, lines 8-15)*

Fitler teaches of configuring dynamic groups using tree structured directory service implemented in connectionless protocols such as LDAP and X.500.

- *wherein change information is submitted for multicast by a plug-in that extends capabilities of the directory server (Fitler, col.1, lines 23-63, lines 65-67; col.3, lines 34-35; col.4, lines 16-18; col.5, lines 11-13, lines 31-36; col.6, lines 8-15; col.7, lines 9-12)*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Fitler with the teachings of Crawley to provide a technique for defining groups of users who access network

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services, or are provided network services, in such a way as to determine membership only when the service is requested or about to be provided, and to determine this membership based on a flexible specification of user or object attributes.

10. With regard to claims 7-8 and 24-25, Crawley discloses,

- *wherein a client registers with at least one of the plural multicast groups in order to obtain the change information corresponding to each multicast group for which the client has registered (Crawley, col.2, lines 46-49; col.4, line 63 – col.5, line 3; col.5, lines 18-35, lines 61-66; col.9, lines 29-33; modules 66-70, fig.3)*

Crawley teaches of configuring multicast groups by adding, deleting or modifying network nodes as members that subscribes to receive changes or updates in the network topology. It is well known in the art of multicasting that the client must register or subscribe to a group in order to receive update or information regarding the group.

Response to Arguments

11. Applicant's arguments with respect to *claims 1, 9, 12, 19, 29, 32 and 34* have been considered but they are not persuasive.

12. With regard to claims 1, 9, 12, 19, 29, 32 and 34, the Applicants point out that:

- *The applied art, alone or in any permissible combination, is not seen to disclose or to suggest the features of the present invention. More particularly, the applied art is not seen to disclose or to suggest at least the feature of establishing plural*

groups/multicast groups each corresponding to a receive type of change category of a type of change made to a directory server, and when a change is made to a directory of the directory server, submitting change information to each member which belongs to one of the plural groups/multicast groups corresponding to the change category of the type of change made to the directory.

- *This is readily apparent from Crawley's failure to disclose anything with regard to the nodes in the network topology becoming a member of a particular group corresponding to a change category of a type of change made to the network topology so that the node will only receive change information corresponding to the specific type of change made to the topology.*

However, the Examiner finds that the Applicants' arguments are not persuasive and maintains that Crawley discloses,

- *establishing plural multicast groups, each multicast group corresponding to a respective change category for a type of change made to the directory in the directory server; and (Crawley, col.2, lines 46-49; col.4, line 63 – col.5, line 3; col.5, lines 18-35, lines 61-66; col.9, lines 29-33; modules 66-70, fig.3)*

Crawley teaches of configuring multicast groups by adding, deleting or modifying network nodes as members that subscribes to receive changes or updates in the network topology. According to Crawley, *"some network nodes participating in a particular multicast session may be preconfigured by the network administrator"* (Crawley, col.4, lines 65-67) implying that the network administrator may preconfigure a multicast session for a set of network nodes or group that, in responding to *"various types of changes, including adding new multicast*

members, deleting existing multicast members”, etc. (Crawley, col.5, lines 23-25), “the multicast control information and network nodes participating in the multicast sessions are updated” (Crawley, col.5, lines 27-29). Furthermore, according to Crawley “this updating may include modifications to reflection points, distribution trees, group members, existing network connections, or existing facilities” (Crawley, col.5, lines 29-31). Crawley also states “network nodes not participating in the multicast session (i.e. subscribing to a particular change or event) do not receive any control information” (Crawley, col.5, lines 58-59) and that “control point 22 monitors the network for any changes to the multicast session or changes in the network topology. If control point 22 identifies any changes, the multicast session and network nodes participating in the session are updated as needed” (Crawley, col.5, lines 64-67). Hence, Crawley anticipates the updating of multicast information with regards to various types of changes, including adding new multicast members, deleting existing multicast members, network node failures, or network link failures to network nodes participating in the multicast sessions and particularly to group members of such sessions.

- *submitting change information for multicasting responsive to a change being made to the directory in the directory server, the change information being submitted to each member which belongs to a selected one of the plural multicast groups corresponding to the change category of the type of change made to the directory in the directory server. (Crawley, col.2, lines 46-49; col.4, line 63 – col.5, line 3; col.5, lines 18-35, lines 61-66; col.9, lines 29-33; modules 66-70, fig.3)*

Crawley teaches of configuring multicast groups by adding, deleting or modifying network nodes as members that subscribes to receive changes or updates in the network topology. Crawley teaches of transmitting the updates information, which reflects a change in network topology (i.e. node added, node deleted, etc.) via multicasting to relevant nodes that are members of particular multicast groups, which may subscribe to receive updates on added nodes, deleted nodes, etc. Furthermore, it is well known in the art to configure multicast groups containing members that are interested in receiving certain updates or information in response to a network topology change such as updates on added nodes, deleted nodes, etc. Crawley also states *"network nodes not participating in the multicast session (i.e. subscribing to a particular change or event) do not receive any control information"* (Crawley, col.5, lines 58-59) and that *"control point 22 monitors the network for any changes to the multicast session or changes in the network topology. If control point 22 identifies any changes, the multicast session and network nodes participating in the session are updated as needed"* (Crawley, col.5, lines 64-67).

Therefore, the Applicants still failed to clearly disclose the novelty of the invention and identify specific limitation, which would define patentable distinction over prior art.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

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- Funk et al. (US006493715B1) relates generally to distributed computing systems, and specifically to treatment of configuration changes in clusters used in distributed computing applications.
- Dennis et al. (US006466932B1) relates generally to computer systems and networks, and more particularly to an improved method and system for implementing policy for users and computers.

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 571/272-3911. The examiner can normally be reached on M-F 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal D. Dharia can be reached on 571/272-3880. The fax phone numbers for the organization where this application or proceeding is assigned are 571/273-8300 for regular communications and 571/273-8300 for After Final communications.

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Thomas Duong (AU2145)

September 29, 2005


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER